First record of *Pediculaster* (Acari: Pygmephoridae) for Argentina, collected on the horn fly *Haematobia irritans* (Diptera: Muscidae)

Most Tarsonemina are free-living mites, as well as simbionts on a variety of insects. Intraspecific polymorphism, which excludes sexual dimorphism, is a very common phenomenon and was termed "phoretomorphism" (Mahunka, 1978). It occurs usually in females (only seldomly in males) and has been observed primarily in the morphology and number of segments of the first legs. This phenomenon was unrecognized or misinterpreted for a long time. In many opportunities, the genera *Siteroptes* Amerling, *Pygmephorellus* Cross & Moser, and *Pediculaster* Vitzthum have been confounded (Smiley & Moser, 1976; Mahunka, 1978). Many authors classified tetramerous and pentamerous females as different species, and even in different genera or subfamilies. Camerik & Ueckermann (1995) cleared this systematic confusion, redescribing the phoretic females of *Pediculaster*. Their conclusions fitted properly with Canestrini's (1888) observations: tetramerous morph specimens (in leg I) are conspecific with pentamerous ones, being the first as "ninfa femminile de viaggio" (adapted to a migratory life style). These authors emphazised: "It is surprising that none of his contemporaries nor acarologists of later dates had taken up Canestrini's (1888) suggestion on conspecificity of the two morphs". The species of *Pediculaster* constitute a group of phytofagous mites, which frequently use different fly-phoronts in order to find appropriate breeding sites, e. g., dung pads, cattle manure (Mahunka, 1970; Rack, 1974).

The horn fly *Haematobia irritans* (L.) is a parasitic haematophagous fly, ranged in the Old World, which since the last century has invaded different places in the New World (USA). This species was recorded for the first time for northern Argentina in 1991, and in 1993 it was found in nearly all cattle farms in the country (Romano & Ferrari, 1993). During a taxonomic and ecological study on fly related mites carried out during 1993, in Miramar (southeast of Buenos Aires province) seven infected horn flies were collected on dairy cattle. Posterior examination of flies revealed that all specimens had attached many mites on the sternites of thorax and abdomen ($\bar{X}$= 37 phoretic mites per fly), which were cleared by beating the mites in lactic-acid solution (50 %), and posteriorly examined by using a contrast phase microscope. Mites were determined as phoreto-morph females of *Pediculaster*, fitting properly with the redescription of the genus by Camerik & Ueckermann (1995). These specimens have four segments in legs I, comprising the stout complex tibiotarsus.

The Pygmephoridae fauna of the Neotropics is very poorly known, and comparisons of the specimens with species from other biogeographical regions are needed in order to determine if they represent a new species or not. The fact that the phoront is a new pest for Argentina suggests that these mites arrived during the horn fly invasion in the country, or that they could have been associated previously with another fly-species.

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